

## Exhibit 6

# Milk jug with froth-forming device for making "cappuccino" and the like

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Publication date: 1996-08-28  
Inventor: GHIDINI TIZIANO (IT)  
Applicant: FRABOSK CASALINGHI SPA (IT)  
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Priority number(s): IT1994MI00771U 19941122

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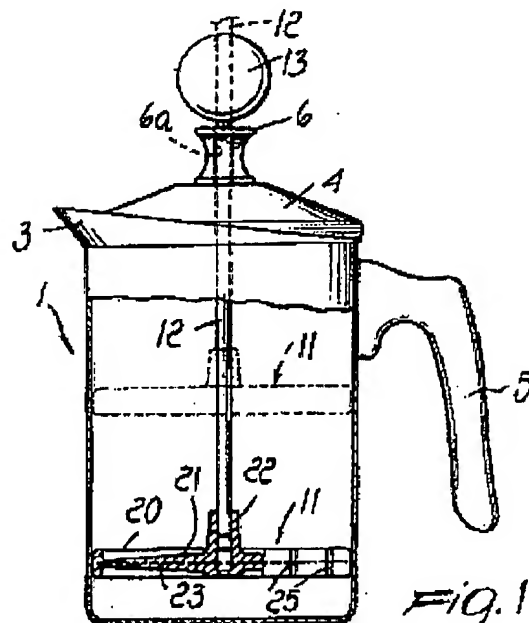
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Abstract not available for CN1129544  
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A milk jug with froth-forming device for making cappuccino and the like, including a container body (2) that can be closed with a lid (4) that supports and guides a froth-forming element (10), which is constituted by a plunger element (11) associated with a rod (12) that protrudes from the lid (4).



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**Family list**

26 family members for:

**CN1129544**

Derived from 22 applications.

- 1 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: AT22234 U1 - 2002-05-27
- 2 MILCHKANNE MIT AUFSCHÄUMVORRICHTUNG ZUM ZUBEREITEN VON "CAPPUCCINO" ODER DERGLEICHEN  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: AT388659 T - 1997-06-15
- 3 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO Applicant: FRABOSK CASALINGHI SPA  
 EC: A47J43/10C2 IPC: A47J31/00; A47J31/05; (+3)  
 Publication info: AU760991 B2 - 1999-01-14
- 4 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J31/00; A47J31/05; (+3)  
 Publication info: AU7673395 A - 1999-05-20
- 5 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J27/60; A47J36/20  
 Publication info: BR2606279 A - 1997-10-21
- 6 MILK JUG WITH FROTH-FORMING DEVICE FOR MAKING "CAPPUCCINO" AND THE LIKE  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J31/44; B01F3/04  
 Publication info: CA2162959 A1 - 1996-05-23
- 7 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J31/41  
 Publication info: CN1128844 A - 1996-09-28
- 8 Milchjug mit Aufschäumvorrichtung zur Zubereitung von Cappuccino u.dgl  
 Inventor: Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: DE29622364U U1 - 2002-05-16
- 9 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: DE296004610 D1 - 1997-09-04
- 10 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: DE296004617 T2 - 1998-01-15

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**Family list**

26 family members for:

CN1129544

Derived from 22 applications.

- 11 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: DK713869T T2 - 1997-10-29
- 12 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: EP0713609 A1 - 1996-05-29  
 EP0713609 B1 - 1997-07-23
- 13 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: ES205833T T2 - 1997-10-16
- 14 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/10  
 Publication info: GR3024618T T2 - 1998-01-30
- 15 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47G  
 Publication info: IT227713Y Y1 - 1997-12-15  
 IT46940774V V0 - 1994-11-21
- 16 MILK SERVER WITH BEATER TO MAKE CAPUCCINO,ETC  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J31/44; A47G19/12; (+1)  
 Publication info: JP3304730B2 B2 - 2002-07-22  
 JP8218932 A - 1996-09-10
- 17 MILK JUG WITH FROTH-FORMING DEVICE FOR MAKING "CAPPUCCINO" AND THE LIKE  
 Inventor: TIZIANO GHIDINI (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J47/00  
 Publication info: KR262216 B1 - 2005-07-15
- 18 VESSEL FOR PRODUCING STABLE FROTH OF MILK PRODUCTS  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J43/12  
 Publication info: PL178270B B1 - 2000-08-31  
 PL311432 A1 - 1998-05-27
- 19 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (IT)  
 EC: A47J43/10C2 IPC: A47J  
 Publication info: TR960692 A2 - 1996-08-21
- 20 Milk jug with froth-forming device for making "cappuccino" and the like  
 Inventor: GHIDINI TIZIANO (IT) Applicant: FRABOSK CASALINGHI SPA (US)  
 EC: A47J43/10C2 IPC: B01F11/00  
 Publication info: US6227427B B1 - 2001-04-17

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**Family list**


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**CN1129544**

Derived from **22** applications.

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|-----------|---|--|
| <b>21</b> | Milk jug with froth-forming device for making "Cappuccino" and the like<br>Inventor: GHIDINI TIZIANO (IT)<br>EC: A47J43/10C2<br>Publication info: US20050149 A - 1999-12-03 | Applicant: FRABOSK CASALINGHI SPA (IT)<br>IPC: B01F11/00 |
| <b>22</b> | Milk jug with froth-forming device for making "cappuccino" and the like<br>Inventor: GHIDINI TIZIANO (IT)<br>EC: A47J43/10C2<br>Publication info: ZA20050775 A - 1995-06-11 | Applicant: FRABOSK CASALINGHI SPA (IT)<br>IPC: A47G      |

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(54) **Milk jug with froth-forming device for making "cappuccino" and the like**  
**Milchkanne mit Aufschäumvorrichtung zum Zubereiten von "Cappuccino" oder dergleichen**  
**Réceptier de lait avec un dispositif de moussage pour faire du "Cappuccino" ou similaire**

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(56) References cited:

|                 |                 |
|-----------------|-----------------|
| EP-A- 0 167 423 | BE-A- 384 589   |
| DE-C- 333 081   | FR-A- 642 130   |
| FR-A- 965 122   | FR-A- 1 055 182 |
| GB-A- 363 543   | GB-A- 395 548   |
| US-A- 3 137 228 |                 |

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# Description

The present invention relates to a method for making frothed milk for "cappuccino" and the like.

It is known that a steam jet having the purpose of emulsifying the milk is currently used to make beverages such as cappuccino and the like.

Of course, this type of application is usable only if a machine capable of generating the desired jet of steam is available.

Therefore, it is practically impossible to make a cappuccino in a household environment, since devices allowing to emulsify the milk in a quick and simplified manner are not currently available.

It is also known from FR-A-642130 a household device which is used for shaking eggs and cream. The device comprises a box shaped body provided with a movable lid. the lid is provided with a through hole in which is slidably engaged a rod having an end fixed to a handle and the other end provided with a couple of meshed discs. By subjecting the discs to a reciprocating movement a quick mixing of the eggs or of the cream occurs achieving the desired degree of density.

A principal aim of the present invention is to solve the above described problem by providing a method for making frothed milk for cappuccino and the like that allows to emulsify the milk without having to resort to the use of a jet of steam.

Within the scope of the above aim, a particular object of the invention is to provide a simplified method allowing to obtain the froth with very simple actions that can be performed easily by anyone.

Another object of the present invention is to provide a method for making cappuccino and the like using a froth-forming device which is capable of giving the greatest assurances of reliability and safety in use by virtue of its particular constructive characteristics.

Another object of the present invention is to provide a method using a froth-forming device that can be easily produced starting from commonly commercially available elements and materials and is furthermore competitive from a merely economical point of view.

This aim, these objects, and others which will become apparent hereinafter are achieved by a method for making frothed milk for cappuccino and the like, according to the invention, as disclosed in claim 1.

Further characteristics and advantages of the present invention will become apparent from the following detailed description of a milk jug with froth-forming device for making cappuccino and the like, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

figure 1 is a partially cutout view of the jug according to the invention;

figure 2 is a perspective view of the froth-forming element;

figure 3 is a plan view of the plunger element.

With reference to the above figures, a milk jug with froth-forming device for making cappuccino and the like, is generally designated by the reference numeral 1 and comprises a container body 2 preferably but not necessarily made of stainless steel and having a cylindrical shape. Possibly a beak 3 shaped like an inclined plane that is formed monolithically with the container body 2 may be provided, and furthermore the body 2 can be equipped with a gripping handle or handgrip 5 made of heat insulating material.

A lid 4 can be coupled to the container body and is also preferably made of stainless steel; its size is such that it is associable with the inside of the body 2 by simply pressing.

The lid 4 acts as a supporting and guiding element for a froth-forming element, generally designated by the reference numeral 10, that is advantageously constituted by a plunger element 11 connected to a rod 12 that passes through the lid 4 and ends with a grip knob 13, preferably made of a heat insulating material.

In order to facilitate the actuation, a finger-bearing element 6, made of heat insulating material, is provided on the lid 4 in the passing zone of the rod 12; further to providing a finger rest, the element 6 also forms a through guiding channel 6a for the rod.

The plunger element 11 has a disk-like body formed by a circumferential rim 20 that is connected, by means of spoke-like arms 21, to a central hub 22, in which the rod 12 is inserted.

The spoke-like elements 21 retain a mesh 23 affecting the entire surface of the disk-like element and decrease in thickness from the hub towards the outer rim 20.

The outer rim or ring 20 has a diameter that substantially matches the inside diameter of the container body 2 and is provided, on the outer part, with a plurality of recesses 25 that allow the flow of liquid in addition to the liquid that passes through the mesh 23.

In practical use, by subjecting the plunger element 11 to a reciprocating motion, the liquid is forced to pass through the disk-like body, consequently emulsifying the air inside said liquid and producing the froth or cream.

To pour out the cream obtained, the lid 4 is removed by using the finger-bearing element 6, while the plunger 11 may be used in order to facilitate the outflow of the cream.

With the above described jug it is therefore possible, with extremely simple means and with an action that consists simply of a reciprocating motion of the plunger element, to emulsify the liquid by including air inside it, thus producing the typical froth used to make cappuccino and the like.

From the above description it is thus evident that the invention achieves the intended aim and objects, and in particular the fact is stressed that the particular structure of the disk-like element, which has tapering spokes, allows to provide flexibility on the outer portion of the disk-like body, further increasing the inclusion of air particles inside the liquid.

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In practice, the materials employed, so long as they are compatible with the specific use, as well as the contingent shapes and dimensions, may be any according to the requirements.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

#### Claims

1. Method for making cappuccino or the like with frothed milk comprising the steps of inserting the milk in a container body (2), heating the milk and emulsifying the milk so heated characterized in that the heated milk is emulsified by causing it to pass through a froth forming element (10) constituted by a plunger element (11), whereby the plunger element is subjected to a reciprocating motion (11) in the heated milk, said plunger element (11) being supported and guided by a lid (4) which can close the container body (2) and being associated with a rod (12) that protrudes from said lid (4).
2. Method according to claim 1, characterized in that said lid comprises a finger-bearing element (8) positioned on said lid (4).
3. Method according to claim 2, characterized in that said finger-bearing element (8) is made of a heat insulating material.
4. Method according to claims 2 or 3, characterized in that said finger-bearing element forms a through channel (6a) for guiding said rod (12).
5. Method according to one or more of the preceding claims, characterized in that said plunger element (11) has a disk-like body constituted by an outer rim (20) or ring that is connected, through spoke-like arms (21), to a central hub (22) for connecting said rod (12).
6. Method according to claim 5, characterized in that said disk-like body has, on its main surface, a mesh (23) that is supported by said outer rim (20) or ring and said spoke-like arms (21).
7. Method according to claims 5 or 6, characterized in that the cross-section of said spoke-like arms (21) decreases from said hub (22) towards said outer ring or rim (20).
8. Method according to any of the claims from 5 to 7, characterized in that said outer rim or ring (20) has, on its external peripheral region, recesses (25) that

allow an additional flow of liquid during the reciprocating movement of said plunger element (11).

#### Patentansprüche

1. Verfahren zur Zubereitung von "Cappuccino" oder ähnlichem mit geschäumter Milch, umfassend die Arbeitsschritte, die Milch in ein Gehäuse (2) einzuführen, die Milch zu erhitzen und die so erhitze Milch zu emulgieren, dadurch gekennzeichnet, daß die erhitze Milch emulgiert wird, indem sie durch ein aus einem Kolbenelement (11) bestehendes Aufschäumelement (10) gebracht wird, wodurch das Kolbenelement (11) einer Vor- und Rückwärtsbewegung in der erhitzten Milch ausgesetzt ist, wobei dieses Kolbenelement (11) über einen das Gehäuse (2) abschließenden Deckel (4) gelagert und geführt und einer aus dem Deckel (4) vorstehenden Stange (12) zugeordnet ist.
2. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß der Deckel ein Fingerauflageelement (6) umfaßt, das am Deckel (4) positioniert ist.
3. Verfahren nach Anspruch 2, dadurch gekennzeichnet, daß das Fingerauflageelement (6) aus einem wärmedämmenden Material besteht.
4. Verfahren nach Anspruch 2 oder 3, dadurch gekennzeichnet, daß das Fingerauflageelement einen durchgehenden Kanal (6a) zur Führung der Stange (12) bildet.
5. Verfahren nach einem oder mehreren vorstehenden Ansprüchen, dadurch gekennzeichnet, daß das Kolbenelement (11) einen scheibenförmigen Körper umfaßt, der aus einem äußeren Rand (20) oder Ring besteht, der über Speichen (21) bildende Arme mit einer mittigen Nabe (22) zur Verbindung der Stange (12) verbunden ist.
6. Verfahren nach Anspruch 5, dadurch gekennzeichnet, daß der scheibenförmige Körper auf seiner Hauptfläche ein Netz (23) besitzt, das durch den Außenrand (20) oder Ring und durch die, Speichen (21) bildenden Arme getragen wird.
7. Verfahren nach Anspruch 5 oder 6, dadurch gekennzeichnet, daß der Querschnitt der, Speichen (21) bildenden Arme ausgehend von der Nabe (22) in Richtung des Ringes oder des Außenrandes (20) abnimmt.
8. Verfahren nach einem jeden der Ansprüche von 5 bis 7, dadurch gekennzeichnet, daß der Außenrand oder Ring (20) auf seinem äußeren Umfangsbereich Ausnehmungen (25) besitzt, die einen Flüssigkeitszusatzstrom während der Vor- und Rückwärtsbewegung des Kolbenelementes (11)

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# Revendications

1. Procédé de préparation de "Capucino" ou similaires avec du lait moussaux, comprenant les étapes d'introduire le lait dans un corps formant récipient (2), chauffer le lait et émulsionner le lait ainsi chauffé, caractérisé en ce que le lait chauffé est émulsionné en causant son passage à travers un élément de moussage (10) se composant d'un élément à piston (11), de sorte que l'élément à piston (11) est soumis à un mouvement en va-et-vient dans le lait chauffé, ledit élément à piston (11) étant supporté et guidé par un couvercle (4) qui peut fermer le corps formant récipient (2) et étant associé à une tige (12) faisant saillie dudit couvercle (4). 5 10 15
2. Procédé selon la revendication 1, caractérisé en ce que ledit couvercle comporte un élément (6) placé sur le couvercle lui-même (4) et destiné à l'appui du doigt. 20
3. Procédé selon la revendication 2, caractérisé en ce que ledit élément d'appui du doigt (6) est fabriqué en une matière thermiquement isolante. 25
4. Procédé selon la revendication 2 ou 3, caractérisé en ce que ledit élément d'appui du doigt forme un canal de passage (6a) pour guider ladite tige (12). 30
5. Procédé selon l'une ou plusieurs des revendications précédentes, caractérisé en ce que ledit élément à piston (11) a un corps en forme de disque comportant une bordure extérieure (20) ou bague qui est reliée, à travers des bras formant rayons (21), à un moyeu central (22) pour la liaison de ladite tige (12). 35
6. Procédé selon la revendication 5, caractérisé en ce que ledit corps en forme de disque a, sur sa surface principale, une grille (23) qui est supportée par ladite bordure extérieure (20) ou bague et par lesdits bras formant rayons (21). 40
7. Procédé selon les revendications 5 ou 6, caractérisé en ce que la section transversale desdits bras formant rayons (21) devient plus mince à partir dudit moyeu (22) vers ladite bague ou bordure extérieure (20). 45 50
8. Procédé selon l'une quelconque des revendications 5 à 7, caractérisé en ce que ladite bordure extérieure ou bague (20) a, sur sa zone périphérique extérieure, des évidements (25) permettant un écoulement supplémentaire de liquide pendant le mouvement en va-et-vient dudit élément à piston (11). 55

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